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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,990	02/04/2002	James J. Kobe	57148US002	4190

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EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,990

Applicant(s)

KOBÉ ET AL.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-15 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Applicant's election of Group I, claims 1-15 in Paper No. 4 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claims 2, 6, 24 and 25 objected to because of the following informalities: In claims 2, 24 and 25, the phrase (>15 lbs/inch) should be deleted since it is exactly equivalent to 2.64 kN/m recited in the claim. The same token is applied to claim 6, the phrase (0.025 inches) should be removed from the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-12, 15, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) substantially as set forth in Paper no. 3. With regard to claim 1, Gehlsen teaches a foam article comprising a plurality of expanded polymeric microspheres and the amount of microspheres in parts by weight per 100 parts of adhesive composition (EMS-pph) meeting a specific range required by the claims (table 1, column 8, lines 40-44).

With regard to claim 9 and newly added claim 25, it appears that Parsons and Applicant are using the same material for an antimony-free intumescent fire retardant which is available under the trade name EXOLIT IFR-23 (Parsons, column 2, lines 60-65 vs. Applicants' specification, page 11, line 18-19). Applicants state that intumescent fire retardants generally comprise an acid source, a char former and a blowing agent (Applicants specification, page 4, lines 17-19). It is not seen that the intumescent fire retardant of Parsons would have a composition different from Applicants' intumescent fire retardant.

With regard to newly added claim 26, Gehlsen teaches the foam material having a density of 960 kg/m³ (column 21, line 14).

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) as applied to claim 1 above, further in view of Bonk et al (US 4,751,269) substantially as set forth in Paper no. 3.
6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) and Bonk et al (US 4,751,269), as applied to claim 13 above, further in view of Perez et al (US 6,110,588) substantially as set forth in Paper no. 3.
7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehlsen et al (US 6,103,152) in view of Parsons et al (US 5,851,663) as evidenced by Mochizuki et al (US 6,139,998). Gehlsen teaches an adhesive tape having every element set out in the claims except an antimony-free fire retardant (examples 1-5).

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Parsons teaches an adhesive tape comprising a foam layer that includes an antimony-free flameproofing agent such as ammonium polyphosphate and a backing layer bonded to the foam layer (column 3, lines 1-12, and 58-60). Parsons also teaches the composition comprising a combination of non-halogen intumescent flame retardant (NHIFR) with a brominated additive to provide a synergistic effect in flammability performance of the composition (column 2, lines 35-40, and 50-54). It is well-known in the art that tris(bromoneopentyl) phosphate is a brominated fire retardant (US 6,139,998, column 8, line 58 et seq.). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an antimony-free fire retardant in the adhesive tape motivated by the desire to achieve a flameproofing effect and environmental safety.

Allowable Subject Matter

8. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art discloses or suggests a flame retardant article comprising a foam layer comprising a polymer, antimony-free fire retardant and a plurality of expanded polymeric microspheres and an adhesive layer bonded to the foam layer wherein the adhesive layer is formulated without fire retardant agent.

Response to Arguments

9. Applicants' amendments received on 05/20/2003 have been entered and fully considered.

10. The 112 claim rejections have been overcome by the present arguments (the last full paragraph at page 8 of Paper no. 4).

11. The art rejections in Paper no. 3 have been maintained for the following reasons.

The arguments that Parson does not make up for the deficiencies of the Gehlsen reference are not found persuasive for patentability. It appears that Gehlsen and Parsons references are related to pressure sensitive adhesives and tapes. Gehlsen teaches an adhesive tape having every element set out in the claims except an antimony-free fire retardant (examples 1-5). Gehlsen does teach the adhesive tape comprising a fire retardant (column 8, line 51). Gehlsen does not specifically disclose the antimony-free fire retardant. Parsons supplies the missing feature. Parsons teaches an adhesive tape comprising a foam layer that includes an antimony-free flameproofing agent such as ammonium polyphosphate and a backing layer bonded to the foam layer (column 3, lines 1-12, and 58-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an antimony-free fire retardant in the adhesive tape motivated by the desire to achieve a flameproofing effect and environmental safety, which is important to the invention of Gehlsen and thus further suggesting the modification.

Applicants argue that Parsons does not disclose a flame retardant article comprising an expanded polymeric foam material comprising a polymer, antimony-free fire retardant, one or more synergists and about 0.1 parts by weight to 20 parts by weight of expanded polymeric microspheres as described in Applicants' amended claim 1. They are not found persuasive. Parsons does not need to disclose a flame

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retardant article comprising a polymer and about 0.1 parts by weight to 20 parts by weight of expanded polymeric microspheres since they have been disclosed in the Gehlsen reference.

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

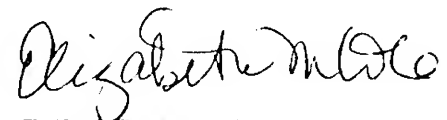
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned

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are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
July 22, 2003



ELIZABETH M. COLE
PRIMARY EXAMINER